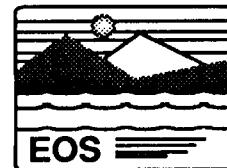


EOSDIS



Earth Observing System (EOS) Data and Information System (EOSDIS)

Project Status

Briefing to MODIS Science Team

**Earth Science Data Information System
(ESDIS) Project
NASA/Goddard Space Flight Center**

May 2, 1995

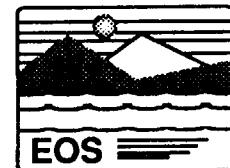
 **Project Status**

- Science Software Integration**
- EOSDIS Networks**
- Organization**
- EOS Reshaping Studies**

 Schedule

- AM-1**
- Overall EOSDIS**

 Issues/Challenges



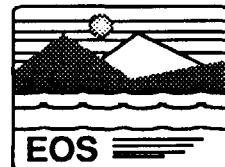
Science Software Integration

- Held first quarterly review of science software for AM-1 instruments (with AM-1 Project)
- Held Science Software Integration & Test Workshop with Instrument Team software developers and DAACs to develop procedures appropriate for each Instrument Team and DAAC

EOSDIS Networks

- Completed analysis of alternatives to consolidate Ecom (EDOS - DAACs) and EOSDIS Science Network (DAAC - DAAC)
 - Project/NASCOM/Hughes/SEAS/Code 520 team has developed options and presented to Project Management
- Network has been simplified through relaxation of data latency and RMA requirements in 1994 Rebaselining

Science Software Integration & Test (SSIT) Workshop Results

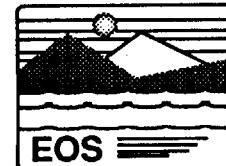


Purpose: To bring DAAC and Instrument Team (IT) personnel together in individual splinter groups to discuss and delineate the science software integration procedures and deliverables.

EOSDIS Results/Issues:

- DAACs and Instrument Teams defined dates by which they plan to complete their science software integration and test (I&T) procedures document
- Release A ECS availability at NSIDC and EDC DAACs to support MODIS will be examined

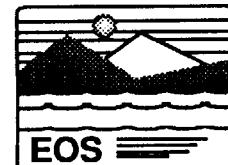
Science Software Integration & Test (SSIT) Workshop Results (cont)



MODIS/GSFC DAAC Results/Issues:

- Science software I&T procedural steps reviewed and modified
- GSFC DAAC will be available for pre-acceptance testing by MODIS Instrument Team. Schedules need to be worked.
- Follow-up meetings scheduled for review and writing assignments of MODIS/GSFC DAAC science software I&T procedures agreement.
- Draft MODIS/GSFC DAAC science software I&T agreement due: 6/1/95. Final due: 10/1/95.
- Need to identify ECS training for IR-1 and GSFC DAAC staffing support for beta science software delivery.
- Need to identify when science software I&T tools will be available.

EOSDIS Science Processing Status/Issues Being Tracked (MODIS Related)

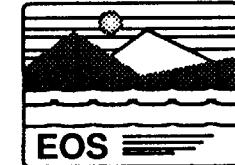


- **Toolkit 5 delivery July 31. Future Toolkit deliveries being scheduled to provide complete HDF and Symmetric Multi-Processing (SMP) functionality.**
- **Bob Evans product generation scheduling requirements being examined.**
- **BONeS Dynamic Modeling - MODIS Level 1 and Level 2 processing modeled; Level 3 being worked.**

Two trade studies:

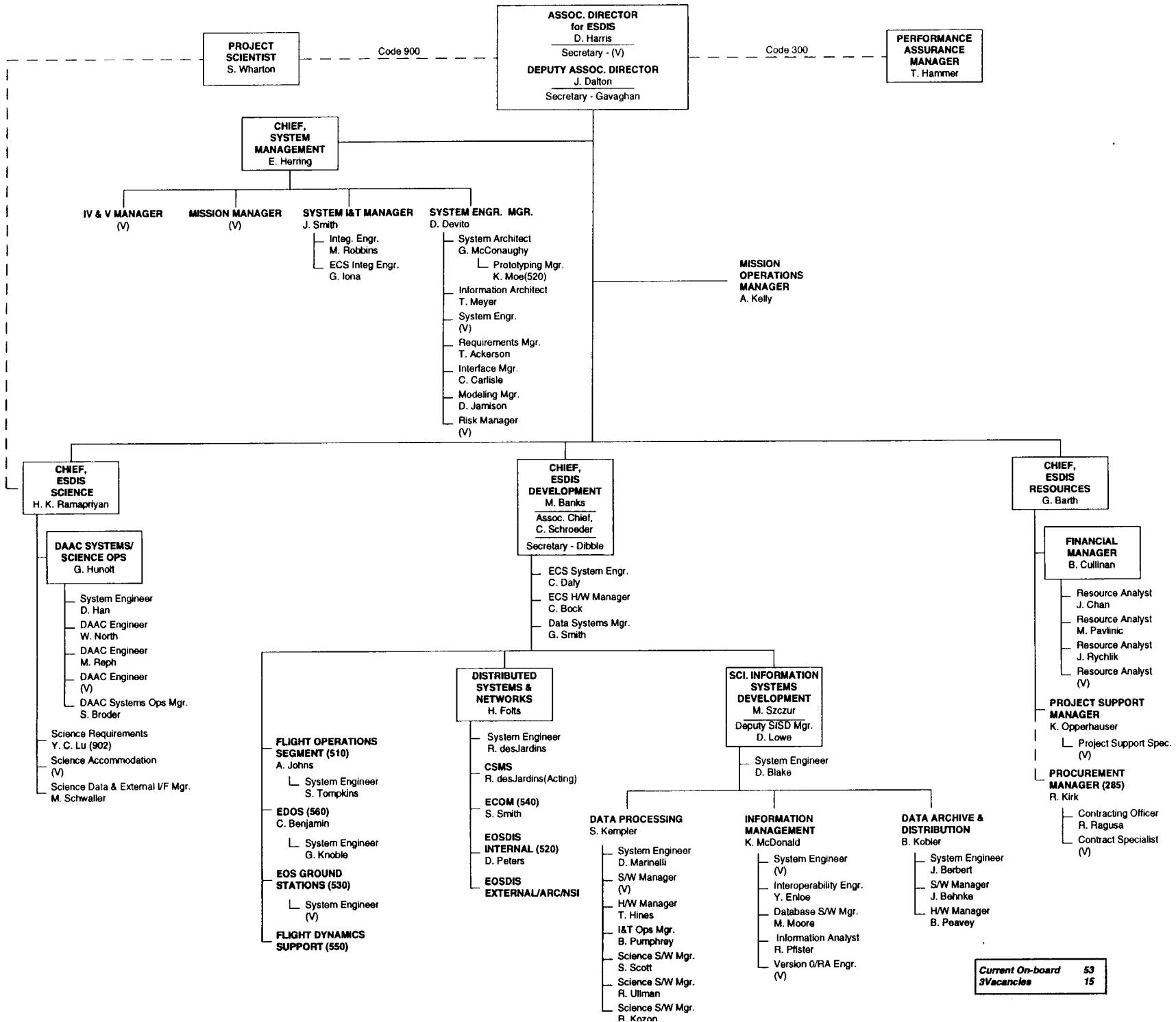
- **Increasing Level 2 granularization from 2.5 mins to 25 mins reduces resource strain on system (assuming algorithms can do this.)**
- **Reducing (combining) number of Product Generation Executables from ~20 to 3 reduces pressure on the scheduler but not the archive requirements.**

EOSDIS Science Processing Status/Issues Being Tracked (MODIS Related) (cont)

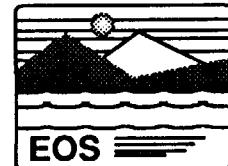


- **MODIS ancillary data questions addressed:**
 - ECS will convert most NOAA data to HDF
 - HDF tools can then be used by ITs to subset the data by parameter and time.
 - Instrument team ancillary data preprocessing software can be run as part of the ancillary data ingest process at the DAAC.
 - **Software module header concerns:** requested flexibility for adding information to header is largely standard.

Earth Science Data & Information System Project (ESDIS)

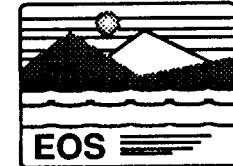


05/02/95



- **Positions filled:**

- **Deputy Manager for Science Information Systems Development (Dawn Lowe)**
- **Interface Manager (Candace Carlisle, replacing Lee Smith)**
- **Distributed Systems and Networks Manager (Hal Folts)**
- **Integration and Test Engineer (Michael Robbins)**
- **ECS Integration and Certification Manager (Glen Iona)**



- **Initiated EOS reshaping studies:**
 - Small spacecraft technology for missions after AM-1, PM-1, and CHEM-1
 - EOSDIS initiatives to simplify flight/ground system to reduce cost
 - incorporate changes in spacecraft to simplify Level 0 processing and enable automation of spacecraft operations
 - Synergy with NOAA spacecraft and data centers
 - Preparation for NASA workshop in July

GODDARD SPACE FLIGHT CENTER

ESDIS SUPPORT FOR AM-1 LAUNCH MASTER SCHEDULE

ORIG APPROVAL 11/30/93
 LAST CHANGE 03/31/95
 STATUS AS OF 05/01/95

	1993		1994		1995		1996		1997		1998		
	JAN	JUL	JAN	JUL	JAN	JUL	JAN	JUL	JAN	JUL	JAN	JUL	
ECS	▼ ECS Award ▼ SRR		▼ SDR	▼ PDR			▼ ECS Interim Release 1		▼ ECS Release B (EOS AM 1, L-7)				
NETWORK BACKBONE & ECOM	▼ ECOM SRR		▼ SDR			▼ NASA Scientific Internet Rev. ▼ ECS Consol. Networks Review ▼ PDR/CDR			▼ ECS Release A (TRMM) UNDER DEVELOPMENT				
EDOS	▼ RFP		▼ Award		▼ EDOS SRR	▼ EDOS SCDR	▼ Ops Proto Bldg 32 Det.		▼ EDOS Test Capability		▼ EDOS Ops Supt Capability		▼ EDOS Sust. Eng. Capability
ETS				▼ ETS Delta SRR		▼ EOC/EOSAM-1 (I/F Test Cap.) ▼ EOS Test System (ETS) SDR ▼ ETS PDR/CDR	▼ ETS Release 1.0 (to ESDIS)						
SCIENCE S/W *						▼ AM-1 Science S/W Test Version ▼ AM-1 Science S/W Version 1		▼ AM-1 Science S/W Version 2					
EGS INTEGRATION & TEST							▼ AM-1 ECT # 1 ▼ AM-1 ECT # 2	▼ AM-1 ECT # 3					▼ AM-1 End-to-End
LAUNCHES/MILESTONES											▼ AM-1 LRD		

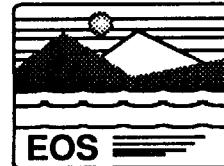
* Delivery dates currently being negotiated.

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EARTH SCIENCE DATA & INFORMATION SYSTEM

ORIG APPROVAL 11/30/93
 LAST CHANGE 03/31/95
 STATUS AS OF 05/01/95

	1993 JAN JUL	1994 JAN JUL	1995 JAN JUL	1996 JAN JUL	1997 JAN JUL	1998 JAN JUL	1999 JAN JUL	2000 JAN JUL	2001 JAN JUL		
LUNCHES/MILESTONES				▼ SEAWIFS LRD ▼ RADARSAT LRD ▼ ADEOS LRD		▼ TRMM LRD ▼ AM-1 LRD ▼ LANDSAT-7 LRD ▼ EOSDIS AM-1 ORR			▼ PM-1 LRD		
EOS GROUND SYSTEM			▼ EOSDIS Version 0		▼ EOSDIS Version 1 ▼ EOSDIS Version 2		▼ EOSDIS Version 3				
EGS INTEGRATION & TEST					▼ AM-1 ECT # 1 ▼ AM-1 End-to-End ▼ TRMM SDP Test #3 ▼ AM-1 ECT # 2 ▼ TRMM Mission Sim #1 ▼ AM-1 ECT # 3 ▼ L-7 ETE #1 ▼ L-7 Jitter Proc. Test ▼ L-7 ETE #2 ▼ L-7 ETE #3 ▼ TRMM Mission Sim #2						
SCIENCE S/W					▼ AM-1 Science S/W Test Version ▼ AM-1 Science S/W Version 1 ▼ CERES, LIS Science S/W Version 1 ▼ CERES, LIS Science S/W Version 2 ▼ AM-1 Science S/W Version 2						
ECS	▼ ECS Award ▼ SRR	▼ SOR ▼ PUR ▼ CDR		▼ ECS Interim Release 1 ▼ ECS Release A (TRMM) ▼ ECS Release B (EOS AM-1, L-7)			▼ ECS Release C (PM-1, HERO) ECS Release D ▼				
EDOS	▼ RFP	▼ Award ▼ EDOS SRR	▼ EDOS SCOR	▼ Ops Proto Bldg 32 Del. ▼ EDOS Test Capability ▼ EDOS Ops Supt Capability ▼ EDOS Sust. Eng. Capability			▼ EDOS System Upgrade #1 Delivery				
NETWORK BACKBONE & ECOM	▼ ECOM SRR	▼ SOR		▼ NASA Scientific Internet Rev. ▼ ECS Consol Networks Review ▼ PDR/CDR	UNDER DEVELOPMENT						
ETS			▼ ETS Delta SRR	▼ EOC/EOSAM-1 (I/F Test Cap.) ▼ EOS Test System (ETS) SDR ▼ ETS PDR/CDR	▼ ETS Release 1.0 (to ESDIS)						



- 1. Continued scrubbing of derived requirements across EOSDIS to minimize costs for functions less critical for support of science user operations and to maximize science data product generation and access**

- 2. Effective communication of an EOSDIS cost model to science community**

- 3. ECS schedule to support AM-1 and Landsat-7**

- 4. Ecom changes:**
 - Delay in PDR/CDR to Consolidate Ecom and EOSDIS Science Network and revert to router-based design from ATM**

- 5. EDOS schedule delays due to EOS Program Rebaselining**